



4th International Tropical Marine Ecosystem Management Symposium

Guadeloupe, 5-9 December 2011



Symposium Report

ACKNOWLEDGEMENTS

The 4th International Tropical Marine Ecosystem Symposium (ITMEMS4) was jointly hosted by the ICRI Secretariat and the Government of France. In addition, the following organizations generously provided support for the organization of the event and to enable the participation of managers and stakeholders from around the world:

- The Buccoo Reef Trust (www.buccooreef.org)
- Japan Ministry of Environment (www.env.go.jp/en/)
- US Department of State (www.state.gov)
- Dutch Caribbean Nature Alliance (www.dcnanature.org)
- Joint Nature Conservation Committee
- International Coral Reef Initiative (www.icriforum.org)
- International Coral Reef Action Network (www.icran.org)
- SeaWeb (www.seaweb.org)

Thanks are also due to members of the ITMEMS4 Organizing Committee who provided support and guidance to the design of the technical programme, and to Russ Avery (SeaWeb) for his support for local logistics and video documentation of participant experiences.

BACKGROUND

The International Tropical Marine Ecosystem Management Symposium (ITMEMS) is a flagship activity of the International Coral Reef Initiative (ICRI). Convened previously in Australia (1998), the Philippines (2003) and Mexico (2006), ITMEMS aims to strengthen the capacities of coastal and marine managers to conserve and promote the sustainable use of coral reefs and related ecosystems.

The Government of France generously hosted the 4th ITMEMS (ITMEMS4) on behalf of the ICRI Secretariat, in Guadeloupe from 5-8th December 2011. This document provides an overview of the Symposium.

OBJECTIVES

The goal of ITMEMS4 was to *'strengthen the capacities of participants to address management challenges in the local context'*.

ITMEMS4 sought to combine practical activities with training to bridge identified gaps in knowledge and experience. Building on the lessons and successes of previous ITMEMS, five core-learning elements were selected as fundamental components of the ITMEMS4 technical programme to support attainment of the above objective:

- **Knowledge and experience exchanges** – providing space for participants to share management experiences and to learn from each other/share knowledge from other disciplines;
- **Exposure to emerging science/technology** – relating current or emerging science and building capacity to access and apply this information in differing contexts;
- **Evidence-based approaches, tools and resources** – helping managers to tap into existing tools and resources and understand how they are being/can be applied and for what benefit;
- **Partnerships and network development** – helping managers to access existing learning networks and partnerships, and identifying and building linkages to networks and partnerships that will support learning and management beyond ITMEMS4;
- **Communications and behavior change** – encouraging participants to develop and access relevant messages and materials to help give voice to their priority issues;

PARTICIPATION

The 4-day meeting convened 57 international participants from 21 countries (see Annex 1), engaging early career managers and field staff on the frontlines of tropical marine conservation and natural resource management. Preference was given to participants with full time responsibility for a tropical marine ecosystem or area (not necessary in association with an MPA) and the implementation of on the water management activities.

Participants joined with 16 international facilitators, inspirational speakers and leaders from a range of different disciplines (e.g. science, media) to strengthen mutual understanding, and to build capacities for the effective management of tropical marine ecosystems.

To ensure that the event reached the intended target audience, all interested parties were required to submit an application form which was used to assist the Organizing

Committee to better understand local priorities and interests of managers, and also to allocate the limited places to those managers who could really benefit from this event.

ORGANISATION

In collaboration with an international committee, the International Coral Reef Action Network (ICRAN) and SeaWeb provided support to ICRI for the development of the technical agenda for ITMEMS4. Participants for ITMEMS4 were engaged via the ITMEMS [website](#) and [Facebook](#) pages. All presentations and outputs from ITMEMS4 will be made available for download from the website.

TECHNICAL PROGRAMME

ITMEMS4 was designed to have a greater focus on capacity development and training than previous symposia through interactive seminars and practical activities. The updated format was intended to improve the value and relevance of the event and its outputs to managers, building on lessons learned from previous ITMEMS.

Eight mentoring and professional development workshops were designed in collaboration with international mentors to respond to priority management and training needs as identified by managers (Annex 5). These workshops formed the central elements of the agenda and sought to engage managers in targeted discussion, experienced based learning, practical training and knowledge exchanges around priority issues. The technical agenda also included:

- Side events to showcase and translate the latest scientific advances around emerging issues (e.g. ocean acidification and alien invasive species control (i.e. the lionfish invasion in the Caribbean) and eradication) and explore the relevance for management;
- ‘Surgery sessions’ to provide an opportunity for participants to engage directly with international mentors and seek technical support in response to challenges specific to their local site context;
- Participant exchanges (e.g. MPA video showcases); and
- A site visit to the Guadeloupe National Park following the closure of the meeting; participants were accompanied by marine management staff providing further opportunities for information and experience exchanges.

To ensure the added value of ITMEMS4 for the target audience, each professional development workshop was designed to:

- Maintain an emphasis on site level management challenges and constraints;
- Engage participants through ‘learning by doing’ approaches;
- Encourage active participation from all participants;
- Recognize and build on existing trainings and workshops in subject areas;
- Facilitate consideration of integrated tropical ecosystems and ecosystem-based approaches;
- Encourage cross learning and exchange between break out groups and also between workshops; and
- Help participants to connect the relevance of each session to their home context, and understand how new skills, tools and resources can be applied in decision-making.

Key technical sessions are described in detail in the next section. The agenda is detailed in Annex 2.

ITMEMS4 TECHNICAL PROGRAMME - SESSION OUTLINES

Strategic Communications

Mentors: Scott Radway (SeaWeb) and Lisa Dropkin (Edge Research)

While innovative tools are continuing to be developed to better manage marine ecosystems, there is a huge gap between what the scientific community understands and what the general public knows. There is also a huge gap between what science tells us and the short-term interests that more often drive policymaking. The problem? It all boils down to communications. SeaWeb and Edge Research started ITMEMS4 with a facilitated a series of interactive sessions that provided participants with a suite of tools to ensure science turns into action. Subjects covered included:

- An overview of what it means to effectively plan for communications;
- Breakout exercises to establish SMART goals for communications;
- The role of market research to help understand your audience;
- Practical exercises to craft compelling messages for your target audience; and
- Introduction to key tools of the trade.

Marine Spatial Planning

Mentors: Tundi Agardy (Sound Seas), Vera Agostini (TNC) and Daria Siciliano (SeaWeb)

Marine Spatial Planning (MSP) is a tool that brings together multiple users of marine spaces to make informed and coordinated decisions about how to use marine resources sustainably. The process is designed to create a more comprehensive picture of a marine area identifying where and how an area is being used, and what natural habitats and species exist. Through planning and mapping managers can consider the cumulative effect of uses in the same area and proactively minimize conflicts. The emphasis of this session was on how to implement strategies and approaches that emerge from marine spatial planning (MSP) efforts, rather than the planning processes itself. Mentors encouraged participants to explore the relevance of MSP at the local level in order to set marine protected areas (MPAs) within a broader spatial management framework. Subjects covered included:

- The relevance of MSP to site level managers – goals and benefits;
- The connection between MPAs and MSP – overlaps, synergies and bridges;
- Mock visioning exercises and role play to establish broad goals for MSP;
- Exchange of specific challenges faced by managers in implementing MSP at the site level;
- Identification and prioritization of paths forward and solutions to shared challenges (including the capacity building and stakeholder engagement needs to advance solutions); and
- Introduction to MSP and ecosystem based management tools that can support problem solving.

The SeaWeb ‘Trade Off Game’, used extensively by numerous agencies and organizations, in many previous MSP trainings was also made available for use as an additional activity. This game encourages dialogue, role-play and decision-making among participants and was used to solidify learning.

Resilient Ecosystems

Mentors: Stephanie Wear (TNC) and David Obura (CORDIO)

The increased frequency and intensity of mass coral bleaching across the globe requires the marine conservation community to respond with innovative new strategies to build resilience into MPAs. Building coral reef survivability based on patterns of resistance and resilience is a relatively new concept. This session was designed to introduce participants to the principles of resilience and key aspects of how to manage coral reef ecosystems for improved resilience. Given the context specific nature of resilience, this session focused on the relevance of resilience for local level decision-making and management strategies. Activities included:

- Understanding the goals and relevance of resilience monitoring and management to site level managers – what is it about and what management benefits can it have;
- Exchange among participants of personal interpretations of what resilience means to them;
- Breakout group exercises to identify the current challenges faced in measuring/monitoring for resilience and using this in management;
- Exchange of ideas for resolving these challenges;
- Identification of resilience indicators and factors already recorded by participants to identify state of knowledge and information gaps at the field level in measuring/monitoring for resilience; and
- Practical mapping exercise to apply resilience principles and identify what management actions to take based on the information provided.

Sustainable Financing of MPAs

Mentor: Thomas Binet (CEMARE and University of Portsmouth)

Globally, the number of MPAs registered by the United Nations has been multiplied ten times over the past 40 years. However, financing of MPAs has not followed the same trend. Recent estimates indicate that MPAs worldwide suffer from a deficit of funding of between 1 billion and 1.7 billion USD. This lack of funding has led to insufficient resources (both human and material) available to correctly manage and enforce management measures in MPAs. A direct consequence of this lack of funding is most often the continuous degradation of ecological resources and ecosystems under protection in MPA. This session sought to provide MPA managers with a clearer vision of the economics of MPAs, such as financial planning, estimation of costs, development of income, preparation of business plans, and design of long-term financial strategy. Activities included:

- Introduction to cost-benefit analyses and their respective uses in local MPA contexts;
- Review of MPA business planning - key content, purpose;
- Overview of common and innovative financing mechanisms used to support MPA financing (e.g. user fees; payment for ecosystem services, trust funds);
- Practical exercises to design a long-term financing strategy for a MPA using case study data; and

- Presentation and critical appraisal of strategies to explore difficulties encountered in preparing an MPA sustainable financing strategy and key drivers of success.

Monitoring Priority Setting in Tropical Marine Ecosystems

Mentors: Annelise Hagan (Southern Environment Association) and Ruben Torres (Reef Check DR)

Monitoring plays a critical role in the management of MPAs, providing the essential information required to make management decisions and to determine if those decisions are working. Despite there being a number of tools and resources, managers highlight significant challenges to design and implement monitoring programmes within the constraints of their technical and financial resources. Through breakout groups and practical exercises this session sought to explore key priorities and objectives that participants have for monitoring, and the limiting factors in effectively implementing monitoring. Participants were supported by mentors through a mock exercise to set up a monitoring program, thinking through all aspects of the process: why the need? site selection, selection of team, limitations, appropriate methodologies, and implementation.

Facilitation and Conflict Resolution

Mentors: Stephanie Kavanaugh (NOAA National Ocean Service) and Rich Wilson (Seatone)

Some of the most challenging decisions in coastal management stem from the relationship between people and the environment and the attitudes, perceptions and beliefs of stakeholders can have significant bearing on the effectiveness of coastal resource management interventions. To help participants effectively engage key stakeholders and address complex human-based challenges, this session sought to develop the skills of participants to plan and facilitate effective participatory processes, engage with difficult stakeholders, and learn ways to manage conflicts within groups. Break out sessions and role-play were used to introduce participants to commonly used techniques and to allow evaluation of their relevance to differing local contexts.

Maximizing Success Through Mentoring, Peer Exchange and the Transfer of Effective MPA Management Models

Mentor: Rich Wilson (Seatone)

Mentoring, or what is sometimes referred to as 'peer coaching' has long been recognized as an organizational and developmental tool that can enhance professional competencies, strengthen institutional capacity and lead to the transfer of knowledge, skills and abilities at multiple scales. In mentoring programs, mentors demonstrate, explain and model while protégés observe, question, explore and apply new skills. As MPAs around the world devise effective management strategies, the concept and practice of mentoring takes on new relevance and may serve to create channels, resources and opportunities that spread institutional knowledge and replicate successful management models.

In this interactive session participants sought to identify the components of a successful mentoring programme and explore how best to incentivize and administrate participation. The needs, interests and insights of participating managers will be used to contribute to the development of a framework for *Mentoring and Peer Exchange* led by CAMPAM and the UNEP Caribbean Environment Programme.

Field Investigation and Marine Resource Injury Events

Mentor: Dave Gulko (Department of Land and Natural Resources, Hawaii)

Regardless of region, most coral reef ecosystems are under various levels of anthropogenic impact. In areas where a management plan is in place with regulations outlined to protect the marine environment, management authorities are often limited in resources to enforce those regulations. The capacity of resource managers to respond to short-term human impact incidences is often limited in terms of training, time, and financial means. Building upon the successful ICRI training for field investigators in investigative, forensic, and rapid ecological assessment techniques, this session sought to introduce ITMEMS4 participants to methods for accurate assessment and data collection in response to natural resource injury events in order to maximize prosecution, mitigation, or negotiation success.

KEY OUTPUTS

During the course of ITMEMS4 participants were encouraged to share information on their key challenges in managing tropical ecosystems along with solutions and innovative approaches that have been successful in their local contexts. Tropical marine ecosystem managers from Montserrat, Belize, Indonesia, Mexico, Philippines, Thailand, and Kenya, worked with SeaWeb to document common priority challenges and the relevant lessons that they had drawn from participation in ITMEMS4. A compilation of these video interviews can be found from the link below <http://www.youtube.com/watch?v=2VSBv9QF30c>. This link will also be added to the ITMEMS website www.itmems.org in due course along with case study write-ups of innovative management responses (Annex 6).

LESSONS LEARNED

The following are quotes from participants in the feedback forms:

“Without a doubt the most useful sharing experience I’ve had at a workshop. I’m really grateful there’s an event of this kind that focuses on giving managers the concepts, ideas and tools to do their jobs better.”

“ITMEMS4 has provided me with the tools to take home and develop my organization, especially in the fields of communication and marine spatial planning.”

“This type of event is really, really needed.”

The updated format for ITMEMS was very well received and participants indicated that the practical training aspects of the event were of significant value. Key lessons learned from the event are captured below and are based on the feedback provided by

participants and mentors; complemented with the experiences of the ITMEMS4 Organizing Committee. This should be used to inform and guide the organization of ITMEMS5.

- Participants valued the many opportunities for interaction and discussion, and enjoyed the chance to listen to the wealth of experiences from other managers. Building additional time in the agenda for participant exchanges is encouraged for future events of this nature;
- The professional development workshops and presentations covered urgent and up-to-date issues on marine conservation and were highly relevant;
- Participants benefited from the diversity of people and countries represented, and appreciated the breadth of difference cultures and contexts;
- ITMEMS4 effectively engaged the core target audience and a diversity of field level managers were represented which enhanced the experiences of participants;
- Early career managers benefited significantly from the networking and mentoring opportunities supported by ITMEMS4 and small group sizes fostered relationship development;
- The informal and supportive atmosphere created by mentors for ITMEMS4 encouraged the inclusion of all participants in breakout group sessions, and discussions;
- The technical surgery sessions, which offered one-on-one time with mentors, were very well received. This gave participants the chance to relate and seek support for their specific local challenges;
- Breakout sessions were considered an effective means of interaction and a good compliment to presentations. It is important to ensure that group work is designed to realize a specific output rather than an activity in and of its own;
- The ITMEMS4 mentors provided floating facilitation support to each other's sessions and actively engaged with participants in group work and discussions when not running their own activities which was important for fostering learning and relationships;
- The active role of the mentors in planning the ITMEMS4 agenda also meant that linkages between different sessions and themes could be effectively identified and built out to best effect;
- The diversity of backgrounds of the mentors was considered a real asset for participants who are dealing with a range of challenges;
- Despite exchanging information on and introducing participants to tools and resources that are in development at the global level, ITMEMS4 maintained a strong emphasis at all times on local level management and how tools can be applied and adapted for local contexts;
- The focus on practical techniques and opportunities for managers to learn and engage in hands on activities was well received. Participants encouraged the format of the event to evolve further to offer additional practical activities;
- The Trade Off game was very well received and considered to offer an excellent learning potential in local site contexts to demonstrate conflicts among user groups;
- There was a good focus on real solutions and actual problems in MPAs which was appreciated;
- Participants were particularly happy to see consideration of themes and skill sets such as communications, facilitation and conflict resolution in the agenda. These types of process skills represent key capacity gaps, but are not normally well covered in marine ecosystem trainings;

- Translation support enabled the active participation of all managers, and whispering translation was considered particularly effective given the break-out group format of ITMEMS4;
- Guadeloupe was not an easily accessible location for participants which increased time in transit (and associated costs), and removed staff from their critical management roles for longer periods;
- There was a significant level of interest in attending ITMEMS4 however the high costs associated with hosting the meeting in Guadeloupe and unavailability of full funding support restricted final participant numbers. To reach this target audience it is highly recommended that more comprehensive funding support be provided for participants;
- The sustainability policy of the hotel restaurant was not very robust and this is something to be considered in more detail when selecting future training locations;
- The agenda for ITMEMS4 was tightly packed and would have benefited from being planned over a longer timeframe to avoid stakeholder fatigue in evening sessions. Participants were particularly keen to have additional time for information sharing;
- Managers would be keen to participate in a side event to showcase their management activities and approaches in more detail;
- Participants would welcome circulation of supporting materials for professional development workshops in advance of the meeting; and
- There is a significant level of interest in ITMEMS 5.

ANNEXES

Annex 1: Participant List

Annex 2: Technical Agenda

Annex 3: Mentor Biographies

Annex 4: Opening ceremony speakers list

Annex 5: Priority Management Challenges - summarized from participant applications

Annex 6: TIDE Co-management case study